

REMARKS

Claims 1, 10, 14-22 and 25 have been amended herein and claims 11-13 and 23-24 have been withdrawn from consideration after an election of species by the applicants.

Claims 1, 10, 14-17 and 19-22 have been amended to no longer recite “a channel” as part of the claimed invention.

Claim Rejections - 35 U.S.C. 102

In the Office Action, claims 1-4, 7-10 and 14-22 were rejected under 35 USC 102(b) as being anticipated by White et al. (5,762,869). Applicants have amended independent claims 1 and 17 to include a core including a manifold having an inlet at its bottom end and an outlet at its top end, as well as, a bubble release disposed between the top end of the manifold and the fiber bundle. According to the present invention, gas bubbles are released from the fluid prior to its flowing through a fiber bundle. The White et al. reference discloses the release of gas bubbles from a fluid following its flow through a fiber bundle. The White et al. reference does not show or describe a bubble release as being positioned between the top end of the manifold and the fiber bundle, wherein bubbles are released from the fluid prior to entering the fiber bundle.

A rejection based on anticipation under 35 U.S.C. 102 requires all of the elements recited in the claims of the invention to be found within the four corners of the cited reference. The White et al. reference does not disclose all of the limitations now present in amended claims 1-4, 7-10 and 14-22. Therefore, the rejection of amended claims 1-4, 7-10 and 14-22 as being anticipated by White et al. (5,762,869) should be withdrawn. Reconsideration and allowance of claims 1-4, 7-10 and 14-22, as amended, is respectfully requested.

Claim Rejections - 35 U.S.C. 103

In the Office Action, claim 25 was rejected under 35 USC 103(a) as being unpatentable over White et al. (5,762,869). Applicants have amended independent claim 25 to include a core including a manifold having an inlet at its bottom end and an outlet at its top end, as well as, a bubble release disposed between the top end of the manifold and the fiber bundle. According to the present invention, gas bubbles are released from the fluid prior to its flowing through a fiber bundle. The White et al. reference discloses the release of gas bubbles from a fluid following its flow through a fiber bundle. In fact, the White et al. reference discloses that the orientation of their oxygenator with the flow of blood into the fiber bundle and arriving at a manifold at the top allows for disentrainment of gaseous microemboli while at the same time providing for high efficiency ratios. White et al believed that their configurations and orientation were significant steps over the prior art (see column 9, lines 36-44). In contrast, the applicants' invention solves a problem not anticipated by the '869 patent in that bubbles which come from the fluid prior to its entering the fiber bundle will not pass through the bundle, thereby impeding the flow of fluid through the fiber bundle. The applicants' invention solves this problem by releasing bubbles from the fluid before the fluid enters the fiber bundle. The White et al. reference does not show or describe a bubble release as being positioned between the top end of the manifold and the fiber bundle, wherein bubbles are released from the fluid prior to entering the fiber bundle. To do so would destroy the intent, purpose and function of the oxygenator as disclosed by the White et al. reference.

A §103 rejection based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference is not proper and the prima facie case of obviousness cannot be properly made. In short there would be no motivation for engaging in the modification or change. To the contrary, White et al. teaches directly away from the proposed modification.

Obviousness cannot be established by the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the modification or change. The White et al. reference does not provide any motivation, suggestion or teachings for a bubble release being positioned between the top end of the manifold and the fiber bundle, wherein bubbles are released from the fluid prior to

entering the fiber bundle. Therefore, the rejection of amended claim 25 as being unpatentable over White et al. (5,762,869) should be withdrawn. Reconsideration and allowance of claim 25, as amended, is respectfully requested.

In the Office Action, claims 5 and 6 have been rejected under 35 USC 103(a) as being unpatentable over White et al. (5,762,869) in view of Winters et al. (5,338,770). Applicants have amended independent claim 1 to include a core including a manifold having an inlet at its bottom end and an outlet at its top end, as well as, a bubble release disposed between the top end of the manifold and the fiber bundle. According to the present invention, gas bubbles are released from the fluid prior to the its flowing through a fiber bundle. Dependent claims 5 and 6 include all of the limitations of amended independent claim 1. Therefore, claims 5 and 6 are also believed to be patentable over the art of record for the same reasons as described above. Therefore, reconsideration and allowance of claims 5 and 6, as amended, is respectfully requested.

Support for this amendment is clearly found in the application as originally filed. No new matter is presented.


Examination and reconsideration of the application as amended is requested. After amending and canceling claims as set forth above, claims 1-10, 14-22 and 25 remain pending in the application and are now believed to be in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

If the Examiner comes to believe that a telephone conversation may be useful in addressing any remaining open issues in this case, the Examiner is urged to contact the undersigned agent at 763-391-9867.

Please charge any required fees or credit any overpayment to Deposit Account
No. 13-2546.

Respectfully submitted,

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